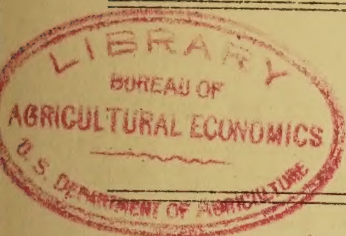


Issued September 15, 1938.



UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL ADJUSTMENT ADMINISTRATION
WASHINGTON, D. C.

NOV 5 1938

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PROCEDURE FOR DETERMINING CORN PRODUCTION

General Instructions

The forms to be used in establishing corn production for fields and farms are 1, Form NCR-240 "Field Check Sheet of Corn Production", to be used by the sampling crew; 2, Form NCR-241 "Office Check Sheet of Corn Production", to be used in the county office; and 3, Form NCR-242 "Field Moisture Test", to be used in the county office by the county agricultural conservation committee.

I. INSTRUCTIONS FOR EXECUTION OF FORM NCR-240

A representative of the county committee and a community committeeman from the respective community in which the farm is located will constitute a sampling crew. The farm owner or operator should be encouraged to accompany the sampling crew.

Before forms NCR-240 are taken to farms by the sampling crew, clerical assistants in the county office will make the following entries in Sections I, III, and IV.

Enter in the space provided therefor in the upper right-hand corner the State and county code, the name of the minor civil division in which the farm is located, the farm number, and the aerial photograph number in counties where aerial photography has been used.

The name of the title owner(s), and operator(s) and their addresses will be entered in the spaces provided in Section I. The total acreage in the farm, as well as the number of cornfields on the farm, should be entered on the appropriate lines of Section I.

Entries for farms for which measurements were completed in connection with the 1936, 1937, or 1938 Agricultural Conservation Program shall be made in Sections III and IV at this time in the county office. In executing the map of the farm in Section IV the field letters and the acreages for the respective fields should be entered. For farms which were not measured in 1936, 1937, or 1938 the necessary data and measurements will be entered by the sampling crew when such form is executed in the field.

Instructions for the Sampling Crew

Entries made on form NCR-240 in the county office will be verified by the sampling crew when the farm is inspected and where necessary suitable corrections shall be made. In making corrections the sampling crew shall draw a line through the original entry and place the correct entry above the stricken entry.

The sampling crew will enter in the spaces provided therefor in the heading for each field, the field letter, the total acres in the field, and indicate by a check mark for each field whether checked or drilled planting has been used.

The measurement of the width between five consecutive rows shall be entered in column (a) opposite the respective sample number. The measurement of the length of rows sampled shall be entered in column (b) opposite the respective sample number.

The weight in pounds of the samples shall be entered in column (d) opposite the properly identified sample number.

The sampling crew shall indicate "yes" or "no" to the questions under Section II in the spaces provided.

"Remarks" as indicated under Section II will be used to indicate special conditions, such as, if a part of the field has been drowned or flooded out, or for some other reason corn fails on a portion of the field, the sampling crew will estimate the approximate acreage of such area and deduct such acreage from the total area of the field. Care should be exercised in estimating such area and it may be advisable to make an actual measurement. A note stating the field letter and acreage deducted in all cases shall be indicated in these remarks. In such case, the entry in Section II with respect to the acres in the field will be the result obtained after the deduction has been made. The total production of such field will then be based on the resulting acreage of the field.

The signature of the sampling crew and the date the inspection of the farm is completed shall be entered in the space provided at the bottom of Section II.

The sampling crew will sample each field of corn on the farm in the following manner:

1. Procedure to be Used for Sampling Square or Rectangular Fields.

Starting at one corner of the cornfield each member of the crew will walk at right angles to each other down the sides of the cornfield. At a distance of approximately 20 percent of the length of the respective sides of the field from the starting point, each will enter the cornfield

at right angles to the side and walk such a distance so that the two shall meet. At this point the crew will measure the distance which exists between five consecutive rows (enter such measurement in column (a), Section II of NCR-240) and in the case of drilled planting husk the corn from four of such rows for a measured distance of 20 feet (enter such measurement in column (b), Section II of NCR-240). In the case of checked planting the crew will measure a distance which exists between five consecutive rows and the distance between six consecutive hills (considering a full stand) in such rows. The measured distance between the corn rows and the length of the sample plot shall be entered in columns (a) and (b), respectively, in Section II of the form NCR-240. The sampling crew will husk all the ears of corn from five consecutive hills in each of the four check rows, making a total sample of 20 hills if there is a full stand. The sample of corn thus husked should be marked in order that its identity may be maintained until after such sample is weighed. The sampling crew shall repeat this procedure at each corner of the field, which gives a total of four such samples for fields of less than 10 acres in size.

For fields of more than 10 acres in size and less than 20 acres in size, the crew shall go to the center of the field and husk an additional sample of the same size as described above.

For fields containing over 20 acres of corn four additional samples shall be obtained by the crew in the following manner:

The crew will re-enter the field at the midpoint of each side of the field and continue into the field 30 percent of the distance across the field. At these points a sample shall be measured off as outlined above, and husked, making a total of nine samples for such field. Measurements for the distance between the corn rows and the length of the rows sampled shall be entered in columns (a) and (b), respectively, in Section II of the form NCR-240.

2. Procedure to be Used for Sampling Irregularly-shaped Fields.

In case of irregularly-shaped fields, the procedure shall be modified to fit the shape of the field; however, in all cases the sample husked shall be measured off in the manner described for square and rectangular fields. In no case shall less than four samples be obtained, and in all cases as the field size increases more samples should be taken as described heretofore.

3. Procedure to be Used in Obtaining a Moisture Test Sample.

(a) After the necessary samples have been obtained from a field they shall be taken to the crib or some other place where a hard-surfaced floor is available and each sample of corn will be accurately weighed and the weight of each sample (after deductions are made for weight of container) recorded in column (d) of form NCR-240.

(b) After properly recording the weights of all of the samples from a field, all samples should be emptied into one pile. A representative sample should be selected by shoveling the pile of corn over at least twice, and then draw from the pile a scoop shovel of ear corn and shell at least two rows of corn from each ear. From the resulting shelled corn select a representative one-pound sample and place it in a moisture-proof container as used in the Corn-Loan Program.

(c) The sampling crew shall deliver all samples of corn to the county office with a properly executed form NCR-240 for each farm.

Instructions for Clerical Assistants in the County Office.

The clerical assistants in the county office will make the following calculations and additions for each field of corn for which information has been listed in Section II of form NCR-240.

Multiply the entry in column (a) times the entry in column (b) for each sample and enter the result rounded to one decimal in column (c).

Total the entries in column (c) and enter the result in the total line of column (c).

Total the entries in column (d) and enter the result in the total line of column (d).

The clerical assistants will check the acreage and field letters as listed in Section II of form NCR-240 with the field letters and acreages as recorded in the field on the map in Section IV.

If the acreages for the various fields of corn have not been previously determined in the county office, and it has been necessary for the sampling crew to measure the fields of corn, the clerical assistants will calculate the acreages from the measurements as submitted by the sampling crew in Section IV of form NCR-240. The acreage determined will be entered in Section II of form NCR-240 for the respective field letters as well as on the map in Section IV.

If there is a discrepancy between the acreage in Section II and Section IV of the form NCR-240 for the same field, the clerical assistants should check the remarks under Section II to ascertain whether a deduction in acreage for flooded or drowned-out areas has been made by the sampling crew. The acreage deducted plus the acreage entered in Section II for the respective field letter should equal the acreage for such field recorded in Section IV for the respective field, otherwise the form should be referred back to the sampling crew for correction.

II. INSTRUCTIONS FOR EXECUTION OF FORM NCR-241

The clerical assistants in the county office shall transfer from form NCR-240 to the spaces provided therefor in the upper right-hand corner of form NCR-241 the State and county code, minor civil division and farm number, and in counties using aerial photography the aerial photograph number.

Instructions for Making Entries in Columns 1 to 12, inclusive.

Column 1.--Enter the field letters which are obtained from Section II of form NCR-240 for the respective farms.

Column 2.--Enter the total of column (d), Section II, form NCR-240 for the respective fields.

Column 3.--Enter the percent of moisture which is obtained from form NCR-242 for the respective field and farm number.

Column 4.--Enter the result obtained by subtracting $15 \frac{1}{2}$ percent from the respective entry in column 3 when the entry in column 3 is greater than $15 \frac{1}{2}$ percent. When the entry in column 3 is equal to or less than $15 \frac{1}{2}$ percent, enter a zero.

Column 5.--Enter the result rounded to one decimal obtained by multiplying the entry in column 2 by the entry in column 4.

Column 6.--Enter the result obtained by subtracting the entry in column 5 from the respective entry in column 2.

Column 7.--Enter the result rounded to one decimal obtained by dividing the entry in column 6 by 70 pounds.

Column 8.--Enter the result obtained by multiplying the entries in column 7 by 43,560 square feet.

Column 9.--Enter the total in column (c) of Section II, form NCR-240 for the respective field.

Column 10.--Enter the result rounded to one decimal obtained by dividing the entry in column 8 by the entry in column 9.

Column 11.--Enter the acreage which is obtained from Section II form NCR-240 for the respective field.

Column 12.--Enter the result rounded to one decimal obtained by multiplying the entries in column 10 by the entry in column 11.

Total the entries in column 12 and enter the result in the total line of column 12. The sum of the entries in column 12 will equal the total number of bushels of corn produced on the farm.

The clerical assistants who prepared form NCR-241 shall date and sign such form in the spaces provided therefor.

III. INSTRUCTIONS FOR EXECUTION OF FORM NCR-242

It is expected that the same moisture-proof container and shipping bags used under the Corn-Loan Program will be furnished the sampling crew by the county committee.

The field moisture test form shall be executed in duplicate for the respective farms. Both copies shall be mailed to the State office. The field moisture test form should be inserted between the inner cellophane envelope containing the moisture sample and the Kraft envelope so that the forms will not absorb moisture from or impart moisture to the sample.

The clerical assistants should transfer from form NCR-240 to the spaces provided therefor in the upper right-hand corner of form NCR-242 the State, county, and minor civil division code numbers, and the farm number; and, in counties using aerial photography, the aerial photograph number. The name of the owner(s) or operator(s) shall be placed in the appropriate spaces for such. Immediately below the words "Field Moisture Test Form" the name and address of the State chairman shall be entered on the two blank lines provided therefor.

The date, signature of a member of the sampling crew, and field letter shall be entered by the sampling crew. Great care should be exercised by the crew with respect to the entry of the proper field letter.

The name of the county, State, signature of the county chairman and address shall be entered in their respective places.

After the State office has made the moisture test, the original with date and percent of moisture indicated thereon will be mailed back to the county office. The duplicate copy will be filed in the State office.